# Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Docket No. 70239-00086

- (Currently Amended) A low coefficient of thermal expansion cermet material consisting of:
  - a first phase of grains consisting of tungsten carbide (WC) grains; and a second phase of iron-based binder alloy bonding the first phase of grains together and consisting of comprising a blend of iron with Co, Ni, C and Mn;

wherein the binder alloy comprises in the range of from about 10 to 30 percent by weight cobalt based on the total weight of the binder alloy, wherein the binder alloy comprises in the range of from 10 to 30 percent by weight of the total weight of the cermet material, and wherein the binder alloy has a coefficient of thermal expansion of less than about 10 ppm/°C within a temperature range of from 100 to 700°C.

#### 2-6. (Canceled)

 (Previously Presented) The cermet material as recited in claim 1 wherein the iron-based binder alloy comprises in the range of from about 10 to 40 percent by weight Ni based on the total weight of the binder alloy.

## 8-10. (Canceled)

- (Original) The cermet material as recited in claim 1 wherein the difference between the
  coefficient of thermal expansion for the binder alloy and the first phase of grains is less
  than about 5 ppm/°C.
- (Original) The cermet material as recited in claim 11 wherein the difference between the
  coefficient of thermal expansion for the binder alloy and the first phase of grains is less
  than about 2 ppm/°C.

material recited in claim 1.

13. (Original) A rock bit comprising a body having a number of legs that extend therefrom, cutting cones rotatably disposed on an end of each leg, a plurality of cutting inserts disposed in the cutting cones, wherein the cutting inserts are formed from the cermet

Docket No. 70239-00086

 (Currently Amended) A low coefficient of thermal expansion cermet composition consisting of:

a first phase of grains consisting of tungsten carbide (WC) grains; and
a second phase of iron-based binder alloy bonding the first phase of grains
together and consisting of comprising a mixture of Co, Ni, Fe, C and Mn;

wherein the cermet composition has a coefficient of thermal expansion less than that of conventional WC-Co at the same temperature and having the same metal content at a temperature range of from 100 to 700°C; and

wherein the binder alloy comprises in the range of from about 10 to 30 percent by weight of the total weight of the cermet material, and comprises in the range of from about 10 to 30 percent by weight cobalt based on the total weight of the binder alloy.

### 15-18. (Canceled)

- 19. (Previously Presented) The cermet composition as recited in claim 14 wherein the iron-based binder alloy comprises from about 10 to 40 percent by weight nickel based on the total weight of the binder alloy.
- (Original) The cermet composition as recited in claim 19 wherein the binder alloy has a
  coefficient of thermal expansion of less than about 10 ppm/°C within a temperature range
  of from 100 to 700°C.
- (Original) The cermet composition as recited in claim 19 wherein the difference between
  the coefficient of thermal expansion for the binder alloy and the first phase of grains is
  less than about 2 ppm/°C.

### 22-32. (Canceled)

- 33. (Currently Amended) A rotary cone rock bit comprising:
  - a body having a number of legs that extend therefrom; cutting cones rotatably disposed on an end of each leg;
  - a plurality of cutting inserts disposed in the cutting cones, wherein the cutting inserts are formed from a cermet material consisting of a first phase of grains and a second ductile phase bonding the grains, wherein the first phase of grains eonsists of is tungsten carbide (WC), wherein the second ductile phase is an iron based binder alloy eonsisting of Co, Ni, Fe, C and Mn;

Docket No. 70239-00086

wherein the binder alloy comprises in the range of from about 10 to 30 percent by weight cobalt based on the total weight of the binder alloy, wherein the binder alloy comprises in the range of from about 10 to 30 percent by weight of the total cermet material, and wherein the binder alloy has a coefficient of thermal expansion less than about 6 ppm/°C within a temperature range of from 100 to 700°C.

34. (Original) The rock bit as recited in claim 33 wherein the difference between the coefficient of thermal expansion for the binder alloy and the first phase of grains is less than about 2 ppm/°C.

#### 35-36. (Canceled)

37. (Previously Presented) The rock bit as recited in claim 33 wherein the iron-based binder alloy comprises in the range of from about 10 to 40 percent by weight Ni based on the total weight of the binder alloy.

### 38-40. (Canceled)

41. (Previously Presented) The rock bit as recited in claim 33 wherein the cermet material further comprises a continuous further ductile phase, wherein particles formed from the grains and binder alloy are disbursed therein, the further ductile phase being selected from the group consisting of Co, Ni, Fe, W, Mo, Ti, Ta, V, Nb, B, Cr, Mn and alloys thereof:

Appl. No. 09/494,877 Docket No. 70239-00086

Amdt. dated November 10, 2011 Reply to Office action of May 10, 2011

> wherein the cermet comprising the further ductile phase has a coefficient of thermal expansion less than that of WC-Co at the same temperature and having the same metal content.

42. (Previously Presented) The rock bit as recited in claim 33 wherein the combined WC and binder alloy has a coefficient of thermal expansion that is less than that of conventional WC-Co at the same temperature and having the same metal content within a temperature range of from 100 to 700°C.

43-47. (Canceled)